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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,635	08/31/2001	Peiguang Zhou	KCC-16,631	9238

7590 05/02/2003

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EXAMINER

SALVATORE, LYNDIA

ART UNIT	PAPER NUMBER
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1771

DATE MAILED: 05/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/944,635	Applicant(s) ZHOU ET AL.	
	Examiner Lynda M Salvatore	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 13-30, 33-57 and 60-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-30, 33-57, and 60-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☒ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7 1/2</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments in Paper No 10 have been fully considered and are persuasive. The Final Rejection, Paper No. 9 has been withdrawn. However, upon further consideration, a new ground(s) of rejection is herein set forth below.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 8-16, 20-24, 28-36, 42-51, 55-62, 64, 66, 67 and 68-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu, US 5,468,320 in view of Hall, Jr., et al., US 3,370,106

The patent issued to Zafiroglu teaches an undergarment construction comprising a deformable shell substrate having a plurality of elastic strands such that the when placed under tension the deformable substrate may stretch inelastically and when under contractive forces the elastic strands can pucker or buckle (Column 3, 30-40). Suitable deformable substrate starting materials include non-woven or spun-bonded sheets (Column 3, 45-54). Suitable elastic thread materials include rubber or spandex, which may be covered with conventional non-elastic threads (Column 3, 64-Column 4, 5). Zafiroglu teaches incorporating the elastic threads into the substrate through a variety of methods such as gluing (Column 4, 5-10). The elastic stretch ranges from at least 70% up to about 250% (Column 4, 27-40). The undergarment may further

include an optional absorbing layer comprising woodpulp or cotton fibers sandwiched between a liquid-permeable body-slide liner and a liquid impermeable barrier layer (Column 4, 50-55).

Zafiroglu further teaches the process of folding the undergarment comprising the shell/elastic layer and optional absorbing layer onto itself and seaming (Column 5, 29-34).

Zafiroglu is silent with respect to a suitable gluing agent. Thus, one must look to the prior art for suitable adhesives. The patent issued to Hall, Jr., et al teaches a hot-melt adhesive blend comprising isotactic and atactic polypropylene (Column 1, lines 46-50). The hot-melt adhesive composition is suitable to bond wood, paper, and textiles (Column 1, lines, 35-36). Though, Hall, Jr., doesn't expressly state using the hot melt adhesive in non-woven applications, the teaching of textile application encompasses non-wovens. Textile is freely defined in the art as any product made from fibers; thus, the term refers not only to woven fabrics, but also to non-woven fabrics, knitted fabrics and special fabric construction (*Introductory Textile Science*, Marjory L. Joseph, Copyright- 1986, Page 1). The hot-melt adhesive composition taught by Hall, Jr., et al. preferably comprises a solid atactic polypropylene (essentially non-crystalline) having a molecular weight in the range of 15,000-60,000 and represents from 75-95 percent of the composition (Column 1, lines 57-69 and Column 2, lines 40-45). The isotactic (essentially crystalline) polypropylene component has a molecular weight ranging from 85,000 to 95,000 and represents from 5-25 percent of the composition (Column 2, lines 19-25 and lines 39-45). Hall, Jr., et al. teaches for application to a surface, the adhesive is heated to a temperature in the range of 250°F to 365°F (Column 2, lines 58-60). Hall, Jr., et al., teaches that hot melt adhesives are desirable since they bond by cooling and are re-meltable.

Therefore, motivated by the convenience and re-meltable properties associated with hot melt adhesives it would have been obvious to one having ordinary skill in the art to employ the hot-melt adhesive composition taught by Hall, Jr., et al., as the gluing agent in the elastic garment undergarment of Zafiroglu.

With respect to the composition's melt index and crystallinity limitations recited in claims 2-4, 11-13, 22-24, 31-33, 49-51, and 58-60, since Hall, Jr., et al. teaches the claimed ratio of isotactic and atactic polymers it is presumable that the said properties of melt-flow index and crystallinity would inherently be met by the composition of Hall, Jr., et al. The burden is upon the Applicant to evidence the contrary.

With respect to claims 71-76, the prior art happens to teach hot-melt adhesive compositions used in disposable absorbent personal care articles such as diapers, however, these use limitations are not given patentable weight at this time since the prior *meets* the structural and chemical limitations. In other words, as recited any absorbent article having the elements of claim 48 could function in any one of the capacities recited in claims 71-76 since there are no structural and/or chemical limitations set forth to evidence otherwise.

4. Claims 17-19, 37-41, 63 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu, US 5,468,320 in view of Hall, Jr., et al., US 3,370,106 as applied to claims 1, 21 and 48 above and further in view of Meece et al., US 2002/0039637.

The combined teachings of Zafiroglu and Hall, Jr., et al fail to teach an elastic component with the capability of stretching up to about 800%, however, the patent issued to Meece et al., teaches a non-woven web made from multipolymer filaments (Section 0015). The non-wovens may be carded, spun-bonded, wet laid, air laid, or melt-blown (Section 0043). The non-woven

webs may be bonded with at least one layer of an elastomeric material to form a laminate (Section 0025). Meece et al., teaches the laminate is bonded with the application of hot-melt or suitable other adhesives (Section 0086). The elastomeric material may be selected from strands, scrims, and films (Section 0025). In addition the multipolymer blend used to form the fibers of the non-woven web may also include an elastic component (Section 0018). The laminates with elastomeric members are especially useful in disposable garments (Abstract).

With respect to claims 17-19, Meece et al., teaches that the extensible non-woven webs have extraordinary elongation of up to values of 700% and above (Section 0064).

With respect to claim 37, Meece et al., teaches an extensible web bonded to an elastomeric member selected from the group consisting of strands, scrims, or films.

With respect to claims 38-41, Meece et al., teaches that the fabric laminate is elastic in the cross direction (Section 0087) or if desired, the laminate could stretch in two directions when the elastomeric material is positioned between two non-woven webs (Section 0088 and 0086).

Therefore, motivated to produce an absorbent article with the desired extensibility in both the machine and cross directions, it would have been obvious to one having ordinary skill in the art to use the non-woven extensible webs and the elastomeric members taught by Meece et al., in the absorbent article of Zafiroglu.

5. Claims 5-7, 25-27, and 52-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zafiroglu, US 5,468,320 in view of Hall, Jr., et al., US 3,370,106 as applied to claims 1,21, and 48 above.

Hall, Jr., et al., does not explicitly teach the isotactic content of the isotactic polypropylene as set forth in said above claims, however, it would have obvious to one having

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ordinary skill in the art at the time the invention was made to optimize the amount of isotactic content present in the polymerization product as function of intended use. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 703-305-4070. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 703-308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

ls
April 30, 2003


CHERYL A. JUSKA
PRIMARY EXAMINER

Interview Summary

Application No.

09/944,635

Applicant(s)

ZHOU ET AL.

Examiner

Lynda M Salvatore

Art Unit

1771

All participants (applicant, applicant's representative, PTO personnel):

(1) Lynda M Salvatore.

(3) _____

(2) Christopher Goff.

(4) _____

Date of Interview: _____

Type: a) ☒ Telephonic b) ☐ Video Conference
c) ☐ Personal [copy given to: 1) ☐ applicant 2) ☐ applicant's representative]

Exhibit shown or demonstration conducted: d) ☐ Yes e) ☐ No.

If Yes, brief description: _____

Claim(s) discussed: N/A.

Identification of prior art discussed: Wang and Hall et al.

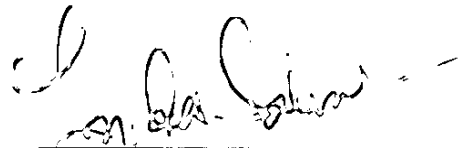
Agreement with respect to the claims f) ☐ was reached. g) ☐ was not reached. h) ☐ N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.


Examiner's signature, if required

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case unless both applicant and examiner agree that the examiner will record same. Where the examiner agrees to record the substance of the interview, or when it is adequately recorded on the Form or in an attachment to the Form, the examiner should check the appropriate box at the bottom of the Form which informs the applicant that the submission of a separate record of the substance of the interview as a supplement to the Form is not required.

It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Applicant argues that no motivation exists to combine the prior art references. Specifically, the patent issued to Wang teaches a flexible polyolefin(FPO)having segments of isotactic and atactic polypropylene interspersed therein and further teaches that the unique stereochemistry of the FPO produces desirable properties. The Applicant argues that Wang teaches away from the use of atactic and isotactic polypropylene or a blend thereof. As such, no motivation would exist to combine the reference of Hall et al., which does teach a blend of atactic and isotactic polypropylene. The Examiner has found the Applicant's arguments to be persuasive and the final rejection, Paper No. 9, is withdrawn . An updated search and a review of the Applicant IDS, Paper 81/2, will be done for the possibility of a new 103 rejection.



CHERYL A. JUSKA
PRIMARY EXAMINER